Claims

1. A process for preparing a pet's chew comprising
- preparing a mixture of a starch derivative, a plasticizer and a fibrous material;
- converting said mixture into a thermoplastic starch; and
- moulding the thermoplastic starch into the desired pet's chew,
wherein the starch derivative is a chemically modified starch.

2. A process according to claim 1, wherein the chemically modified starch is an oxidized starch, starch ester, starch ether, hydrolysed or partially hydrolysed starch or crosslinked starch.

3. A process according to claim 2, wherein the chemically modified starch is a hydroxyalkylated, carboxymethylated, acetylated starch or acid hydrolysed starch.

4. A process according to any of the preceding claims, wherein the starch derivative is a potato, wheat, corn, tapioca, rice or pea starch derivative.

5. A process according to any of the preceding claims, wherein the mixture further comprises a native starch or a physically modified starch, or a second chemically modified starch.

6. A process according to any of the preceding claims, wherein the plasticizer is chosen from the group of polyols, esters of citric acid and urea.

7. A process according to claim 6, wherein the plasticizer is glycerol.

8. A process according to any of the preceding claims, wherein the plasticizer is present in the mixture in an amount of from 5 to 35 wt.%, preferably 18 to 35 wt.%, based on the dry solid weight of the mixture.

9. A process according to any of the preceding claims, wherein the fibrous material is chosen from the group of cellulose, hennep, coconut, grass, flax, potato and other natural fibers.

10. A process according to any of the preceding claims, wherein the fibrous material is present in the mixture in an amount of from 1 to 35 wt.%,

preferably from 1 to 25, more preferably 2 to 20 wt.%, based on the dry solid weight of the mixture.

11. A process according to any of the preceding claims, wherein the fibrous material consists of fibers having a length between 23 and 2000 μm, preferably between 60 and 300 μm.

12. A process according to any of the preceding claims, wherein the mixture comprises water in an amount of from 7 to 35 wt.%, based on the total weight of the mixture.

13. A process according to any of the preceding claims, wherein the mixture further comprises a branched polysaccharide, such as a gum, an alginate or derivative thereof, a malto-oligosaccharide, such as maltose, or a combination thereof.

14. A process according to any of the preceding claims, wherein the mixture further comprises one or more additives chosen from the group of, mono- or di-glycerides, lecithin, oils, fats (preferably rinicus oil), fatty acids or salts thereof (such as calcium stearate), filler materials, vitamins, coloring agents, aromas, sweeteners and taste enhancers.

15. A process according to any of the preceding claims, wherein the mixture is converted into a thermoplastic starch by extrusion at a temperature of from 95 to 180°C, preferably from 100 to 150°C.

16. A process according to claim 15, wherein the mixture is extruded through a mesh having a pore size of from 1 to 5 mm and cut to produce a granulate material.

17. A process according to any of the preceding claims wherein the moisture content of the thermoplastic starch is conditioned to 5 to 20 wt.%, preferably from 6 to 15 wt.%, more preferably from 7 to 10 wt.%, based on the total weight of the thermoplastic starch.

18. A process according to any of the preceding claims, wherein the thermoplastic starch is moulded by injection moulding at a temperature

ranging from 80 to 200°C, preferably from 110 to 170°C, into a mould of suitable shape and size.

19. A pet's chew obtainable by a process according to any of the preceding claims.

20. A pet's chew according to claim 19 having the form of a dog chew, bar or hollow or natural shape.